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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/780,781

02/18/2004

De-Sheng Tsai

9286.32

2750

20792 7590 04/16/2009  
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EXAMINER

COLE, ELIZABETH M

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

04/16/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/780,781	TSAI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Elizabeth M. Cole	1794	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 February 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 22-24, 26-28 and 34-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-24, 26-28 and 34-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 1794

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/11/09 has been entered.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 22-24, 34-39 are rejected under 35 U.S.C. 103(a) as obvious over Suzuki et al, U.S. Patent No. 5,814,569 in view of Kozulla, U.S. Patent No. 5,882, 562. Suzuki discloses nonwoven fabrics comprising polypropylene conjugate continuous filaments, (spunbonded nonwovens), which are subjected to heating and drawing in order to form elastic nonwovens. See col. 3, lines 11-21, col. 4, lines 16-58. The nonwoven has the properties of 86% recovery from 100% elongation in the cross direction and has a ratio of elongation at break in the cross direction to the elongation at break in the machine direction of at least 8. See table 1 and the values for EC/EM as well as EEC 100%. The drawing treatment is performed at a temperature above the softening but below the melting point of the fibers. See col. 9, line 49 - col. 10, line 53. The draw rate is 10-80% and preferably 40-75%. See col. 11, lines 4-28. Suzuki does not disclose the claimed property of at least 60% recovery from a 150% elongation and does not

Art Unit: 1794

disclose the claim strain rate. However, it is reasonable to presume that the material of Suzuki would have the claimed property of at least 60% recovery from a 150% elongation in view of the facts set forth above, that the material of Suzuki comprises polypropylene fibers, that it has the claimed ratio of elongation at break in the CD to the elongation at break in the MD, that is has the claimed recovery from 100% elongation, that is subjected to drawing at the claimed temperatures and at the claimed drawing rate. When the reference discloses all the limitations of a claim except a property or function, and the examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention the examiner has basis for shifting the burden of proof to applicant as in *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980). See MPEP §§ 2112- 2112.02. Further, with regard to the process limitation of the strain rate, the instant claims are drawn to a product. Product by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. "Even though product - by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product - by - process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe* , 227 USPQ 964, 966 (Fed. Cir. 1985).

Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence

Art Unit: 1794

establishing an unobvious difference between the claimed product and the prior art product. In re Marosi, 218 USPQ 289, 292 (Fed. Cir. 1983).

4. It is noted that the material of Suzuki would be capable of performing the intended uses of being used in garments, absorbent articles, etc. , especially since no further structure is set forth with regard to these claims. Further, Suzuki teaches at col.1 that such uses were known in the art as conventional for elastic nonwoven fabrics.

5. Suzuki differs from the claimed invention because while Suzuki teaches bicomponent fibers which comprise polypropylene, Suzuki teaches that monocomponent fibers suffer from drawback such as either degradation of the fibers during bonding or fiber slip during bonding as compared to bicomponent fibers. See col. 12, lines 65-67. Suzuki teaches a fabric which comprised 100% monocomponent polypropylene suffered from fiber slip during bonding and therefore produced lesser results. See comparative example 2 of Suzuki and the discussion at col. 19, lines 1-9. Kozulla teaches forming polypropylene fibers so that they have a skin/core structure so that the skin structure has a higher melt flow rate as compared to the core of the fiber. See col. 3, lines 31-50. Kozulla teaches that such fibers produce improvements in the cross direction including superior CD strength, elongation and toughness. See col. 3 lines 8-27. Kozulla teaches that the fibers having the skin/core structure have superior bond strength as compared with a conventional polypropylene fiber. See col. 5, lines 34-41. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the polypropylene fibers of Kozulla having a skin/core structure wherein the skin has a higher melt flow rate as compared to the core

Art Unit: 1794

to make the nonwoven fabrics of Suzuki, with the expectation that the fibers would produce a fabric having superior CD properties of strength, elongation and toughness as taught by Kozulla and would not suffer from issues of fiber slip or fiber degradation during bonding due to the skin/core structure which Suzuki teaches can produce problems with monocomponent fibers as compared to bicomponent fibers.

6. Once the skin/core polypropylene fibers of Kozulla were provided in the process and structure of Suzuki, it is reasonable to expect that the resulting product would have the claimed properties and/or that it would have been obvious to have optimized the various processing parameters through the process of routine experimentation in order to arrive at a fabric having the desired percent recovery from elongation at 150% and ratio of elongation at break in the CD to elongation at break in the MD of at least 8 as claimed.

7. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Kozulla as applied to claims above, and further in view of Morman et al, U.S. Patent Application Publication No. 2003/0100238. Suzuki discloses an elastic nonwoven fabric as set forth above, but does not disclose laminating the nonwoven to additional layers. Morman teaches that elastic nonwoven fabrics can be bonded to extensible or elastomeric films to provide laminates. See paragraph 0062-0069.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have bonded the fabric of Suzuki to a film as taught by Morman, in order to form a laminate having the additional properties of the film in combination with the nonwoven, such as improved strength, water barrier properties, etc.

Art Unit: 1794

8. Applicant's arguments with respect to claims 22-24, 26-28, 34-39 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

The examiner's supervisor Rena Dye may be reached at (571) 272-3186.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.

/Elizabeth M. Cole/  
Primary Examiner, Art Unit 1794

e.m.c